

THE CLAIM OF THE INVENTION IS:

1. A UV transmissible pipette tip for use in dispensing and assaying samples, said pipette tip being formed from plastic material that is UV transmissible between wavelengths of 200 nm and 350 nm.
2. The UV transmissible pipette tip of claim 1, wherein said plastic material has an average optical density that is no more than about 0.2 between wavelengths of 200 nm and 350 nm.
3. The UV transmissible pipette tip of claim 1, wherein said plastic material is selected from a group consisting of polyolefins, fluoropolymers, polyester, non-aromatic hydrocarbons, polyvinylidene chloride, and polychlorotrifluoroethylenes.
4. The UV transmissible pipette tip of claim 1, wherein said plastic material is selected from a group consisting of Kynar film, KelF film, and Aclar film.
5. The UV transmissible pipette tip of claim 1, wherein said pipette tip has at least two plane-parallel windows on opposite sides of a wall of the pipette tip.
6. A UV absorbance measuring apparatus for measuring concentrations of protein or nuclei acid samples, said apparatus comprising: a pipette tip of claim 1; a pipette for drawing said samples into said pipette tip; a light beam transmitting through said pipette tip and said sample; and an optical detector for measuring the intensity of the transmitted light beam and the subsequent calculation of the concentrations of the samples.
7. The UV absorbance measuring apparatus of claim 6, wherein said light beam comprises a UV light having wavelengths between 200 nm and 350 nm.
8. The UV absorbance measuring apparatus of claim 6, further comprising at least one optical filter located in the path of said light beam for allowing at least one particular wavelength to transmit through said at least one optical filter.

9. The UV absorbance measuring apparatus of claim 8, wherein said particular wavelength is selected from a group consisting of 230nm, 260nm, 280nm, and 320nm.

10. A method for measuring concentrations of protein or nucleic samples, comprising:

providing a UV absorbance measuring apparatus, wherein said apparatus comprises a pipette tip of claim1;

transporting said samples into said pipette tip;

passing a light beam through said pipette tip and said samples;

measuring intensity of the transmitted light beam; and

calculating the concentrations of the samples using the measured intensity.

11. The method of claim10, wherein said light beam comprises a UV light having wavelengths between 200 nm and 350 nm.

12. The method of claim 10, further comprising at least one optical filter located in the path of said light beam for allowing at least one particular wavelength to transmit through said at least one optical filter.

13. The method of claim 12, wherein the particular wavelength is selected from a group consisting of 230nm, 260nm, 280nm, and 320nm.

14. The method of claim 10, wherein said protein comprises an amino acid selected from a group consisting of tyrosine, tryptophan, and phenylalanine.

15. The method of claim 10, wherein the concentrations of the samples are calculated by subtracting the intensity of the transmitted light beam through a blank pipette tip from the intensity of the transmitted light beam through the pipette tip that contains samples.